Connecticut Department of Energy and Environmental Protection

Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

2022 State Diesel Emissions Reduction Act (DERA) Grants

Webinar November 3, 2022
DEEP Mobile Sources Group

Who We Are

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Agenda

- Background on Diesel Emissions Reduction Act (DERA)
- Connecticut State DERA Program
  - Program Summary & Benefits
- Distinctions from VW Program
- Funding
- Application & Selection
- Answers to Common Questions
- Contacting Us
- Q & A Period

DERA
Background

Background & History

- Diesel Emissions Reduction Act was included in the Energy Policy Act of 2005
  - *PUBLIC LAW 109–58—AUG. 8, 2005*
- Annual Budget Allocation by Congress
- Establishes several types of clean diesel funding
  - State DERA: Non-competitive state allocations; state administered
  - National DERA: Regional projects, EPA-administered, focused on public entities (competitive)
    - Clean School Bus is a subset of National DERA (Nationwide lottery)
- 2008 First Year of Funding

State Program Goals & Restrictions

- Connecticut runs its program as a reimbursement program
- Designed to achieve significant reductions in diesel emissions.
- Restrictions
  - Funding limits set by EPA
  - No fleet expansion
  - Scrappage
  - Early Replacement - NO LONGER REQUIRED
  - Limited Model Year Ranges

State Program Schedule

- Solicitation opened on October 20, 2022
  - Email Patrice.Kelly@ct.gov to be added to distribution list
- Up to $1,189,000 Available from 2022 funds
  - EPA allocation
  - VW DERA Option funds as voluntary match
  - EPA Matching Incentive
- Submission Deadline: November 30, 2022 at 4:00 p.m.
- Decisions anticipated by the beginning of January, 2023

DERA v. VW Eligibility

DERA Eligible Projects

- Vehicle & Equipment Replacement *(includes vessels & locomotives)*
  - *Can now be older than EMY 1996*
  - *Class 5-8*
- Repower / Engine Replacement
- Engine Upgrades / Rebuilds
- Clean Alternative Fuel Conversions
- EPA-Verified Idle Reduction Technologies
- Exhaust Emission Control Technologies
- EPA-Verified Aerodynamic Technologies and Low Rolling Resistance Tires

VW Eligible Projects

- Vehicle & Equipment Replacement ~~*(vessels & locomotives)*~~
  - *EMY 1992 – 2009*
  - *Class 4-8*
- Repower / Engine Replacement
- ~~Engine Upgrades / Rebuilds~~
- ~~Clean Alternative Fuel Conversions~~
- ~~EPA-Verified Idle Reduction Technologies~~
- ~~Exhaust Emission Control Technologies~~
- ~~EPA-Verified Aerodynamic Technologies and Low Rolling Resistance Tires~~
- EVSE in a separate program in 2022

DERA Eligible Projects **Not** Eligible for VW

- Replacement of EMY 2010 or newer vehicles with Zero-Emission or CARB Low-NOx vehicles
- Replacement or Repowering of Non-road Construction or Agricultural Equipment including
  - loaders and commercial mowers
  - transport refrigeration units (TRUs)
  - stationary generators
  - pumps
- Engine Upgrades (rebuilds) of on-highway, non-road, marine or locomotive engines
- Clean Alternative Fuel Conversions *(includes EMY 2010 or newer vehicles)*

DERA Eligible Projects **Not** Eligible for VW

- Replacement or repowering for long haul locomotives
  - *VW funding is limited to freight switchers*
- Replacement or repowering of commercial vessels
  - *marine engine funding under the VW Program is limited to tugboats and ferries*
- Idle reduction technologies, including
  - auxiliary power units on long haul trucks and school buses
  - truck stop electrification
  - idle reduction for locomotives
  - shorepower for TRUs
- Emission control technologies for diesel vehicles or equipment.

Swapping Option Under DERA

A 2010 EMY or newer vehicle may be replaced with a diesel equivalent if it will replace a 2009 EMY or older diesel vehicle that is scrapped. *(Requires EPA approval)*

Example:

- Town A wants a new maintenance truck but doesn't have an eligible truck (EMY ≤ 2009) to scrap
- Nearby Town B has several eligible maintenance trucks in its fleet and would like to acquire a good used truck to replace one of them.
- Town A proposes to sell one of its newer trucks, EMY 2010 or newer, to Town B, and replace it with a new truck under a DERA grant; in return, Town B agrees to scrap one of its eligible trucks.

Condition: New vehicles/engines must continue to operate in the same area where the replaced vehicles/engines operated.

Additional DERA Benefit

DERA is less competitive than VW

Restrictions

DERA Projects are limited to Class 5-8 Vehicles

- VW covers Class 4-8 vehicles

Projects initiated prior to filing an application for the program are not eligible for funding

- Submission of an application is not a guarantee that a proposed project will be funded
- Project initiation activities that can disqualify an application include
  - inclusion in a municipal budget
  - initiating an RFP
  - selecting a Vendor
  - ordering vehicles, equipment, or engine
  - hiring a contractor

Restrictions

New vehicles/engines must continue to operate in the same area where the replaced vehicles/engines operated.

Hypothetical 1:

- Town A wants new school buses but its fleet is too new to be eligible
- Town A's school bus provider has older, eligible buses assigned to Town B, which is an Environmental Justice (EJ) community
- Provider proposes scrapping the eligible buses in Town B, moving newer, but not new buses from Town A to Town B, and giving the new buses, purchased under the grant to Town A

This is not generally allowed under either the DERA or VW programs.

Restrictions

New vehicles/engines must continue to operate in the same area where the replaced vehicles/engines operated.

Hypothetical 2:

- Town A wants an electric school bus but cannot afford to purchase one at the 45% DERA rate
- Nearby Town B has older, eligible school buses
- Town A proposes selling a newer bus (MY 2010 or newer) to Town B and purchasing the EV bus with the combined proceeds from the sale and the 45% grant; Town B agrees to scrap an eligible bus.

This is allowed under the DERA program

- Requires DEEP to obtain prior approval from EPA

New Eligibility Requirements from EPA in 2021 are still in effect

2021 EPA Eligibility Requirements

- Ownership, Usage, and Remaining Life
  - The existing vehicle must be fully operational.
  - The participating fleet owner must have owned and operated the vehicle during the 2 years prior to upgrade.
  - The existing vehicle must have at least 3 years of remaining life at the time of upgrade. Remaining life is the fleet owner's estimate of the number of years until the unit would have been retired from service if the unit were not being upgraded or scrapped because of the grant funding.

New EPA Eligibility Requirements (cont.)

- Highway Usage: 7,000 miles/year during 2 years prior to upgrade.
  - School Buses may use mileage from calendar year (Jan-Dec) 2019.
- Nonroad, Locomotive, and Marine Usage:
  - Agricultural Pumps: 250 hours/year during 2 years prior to upgrade.
  - All Other Nonroad Engines: 500 hours/year during 2 years prior to upgrade.
  - Locomotive and Marine Usage: 1,000 hours/year during 2 years prior to upgrade.

New EPA Requirements (cont.)

- Documentation Requirements: Participating fleet owners must attest to the ownership, usage, and remaining life requirements in a signed eligibly statement. DEEP is requesting the documentation at the time of application; it will be submitted to EPA if the project is selected for funding. This documentation is to verify the eligible use of grant funds. A sample eligibility statement may be found at: www.epa.gov/dera/state

DERA
Reimbursement

DERA Reimbursement

Reimbursement for Vehicle Replacement up to:

- 25% of the cost for replacement of Class 5-8 highway diesel trucks and buses with 2019 EMY or newer vehicles
- 50% of the cost for replacement of drayage trucks with 2015 EMY or newer trucks
- 25% of the cost for replacement of non-road vehicles and equipment with 2019 EMY or newer equivalents and locomotives, marine vessels with higher Tier equivalents
- 35% of the cost for replacement with 2019 EMY or newer on-highway vehicles powered by engines certified to meet CARB's Optional Low-NO_X Standards of 0.1 g/bhp-hr, 0.05 g/bhp-hr, or 0.02 g/bhp-hr NO_X
- 45% of the cost for replacement with electric equivalents

DERA Reimbursement

Reimbursement for Engine Replacement (Repower) up to:

- 40% of the cost for replacement diesel engines in a highway vehicles with 2019 EMY or newer engines certified to EPA emission standards
- 40% of the cost for replacement of diesel engines on locomotives, marine vessels, and non-road vehicles and equipment with 2019 EMY or newer equivalents
- 50% of the cost for replacement with 2019 EMY or newer engines certified to meet CARB's Optional Low-NO_X Standards of 0.1 g/bhp-hr, 0.05 g/bhp-hr, or 0.02 g/bhp-hr NO_X
- 60% of the cost for replacement with electric engines

DERA Reimbursement

Reimbursement for Engine Upgrades (Rebuilds): up to 40% of the cost using kits that are verified or certified by EPA or the California Air Resources Board (CARB)

Reimbursement for Clean Alternative Fuel Conversions: up to 40% of the cost for aftermarket alternative fuel conversion systems. These must be certified by either CARB or EPA and otherwise eligible for sale in Connecticut

Reimbursement for Emission Control Technologies (Retrofits): up to 100% of the cost for retrofit technologies for emission control that are certified or verified by EPA or CARB.

DERA Reimbursement

Reimbursement for Idle Reduction Projects:

Stationary Technologies: up to

- 30% of the cost for shore connections for electrified parking spaces, hybrid electric transport refrigeration units or electrified truck stops
- 25% of the cost for eligible marine shorepower systems to allow maritime vessels to “plug into” an electrical power source instead of using diesel main or auxiliary engines while at port

DERA Reimbursement

Reimbursement for Idle Reduction Projects 2:

Stationary & On-Board Technologies: up to

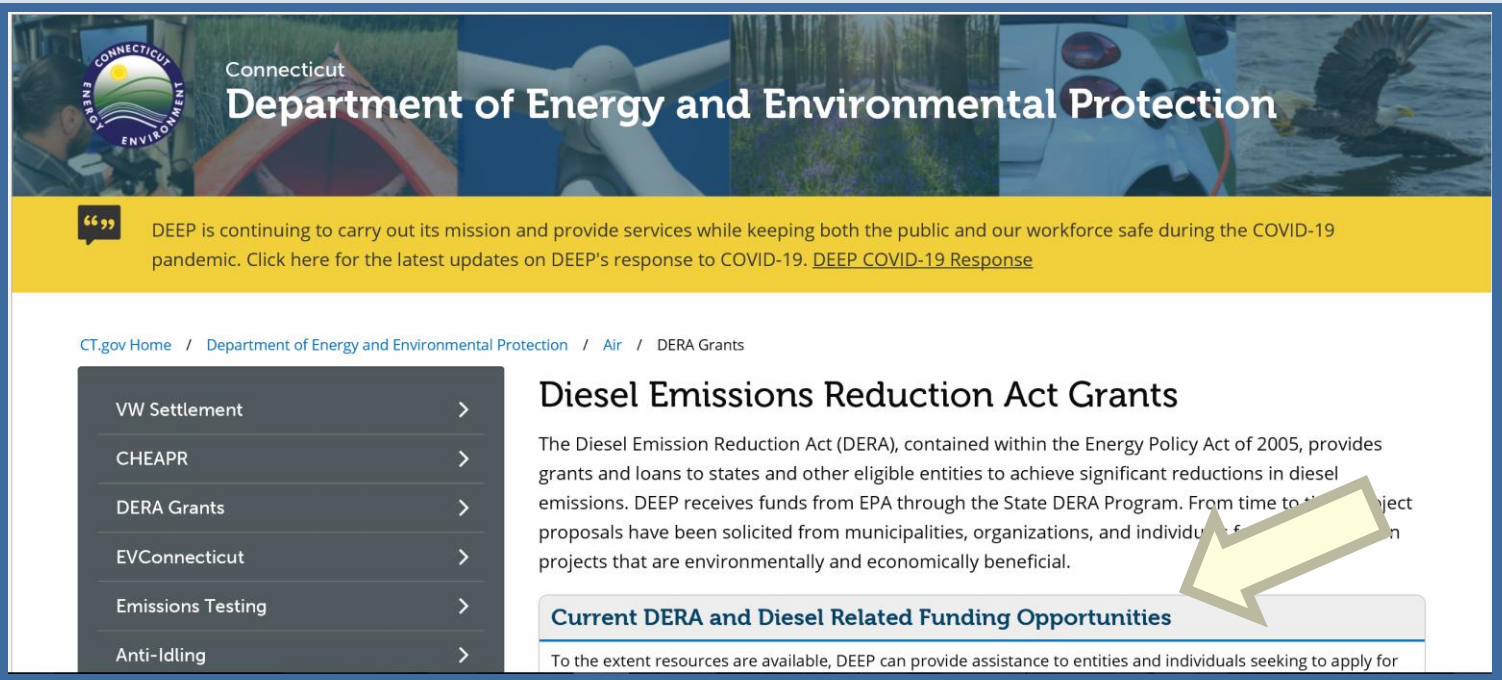
- 40% of the cost for locomotive idle reduction, stationary and on-board
- 25% of the cost for highway idle reduction technologies for long-haul trucks and school buses (includes Auxiliary Power Units (APUs)); up to 100% if combined with retrofit technologies.

EPA-Certified Aerodynamic Technologies and Low Rolling Resistance Tires:

- Up to 100% of the cost for aerodynamic technologies and low rolling resistance tires on long-haul, Class 8 trucks but only if combined with verified exhaust emission controls.

Application & Selection

Application Form



- Application form and instructions will be available at https://portal.ct.gov/DEEP/Air/Mobile-Sources/DERA-Grants
- If applying for funds for more than one source category (i.e. on-road vehicles and non-road equipment), a separate application should be used for each eligible source category project

Part I – Applicant Information

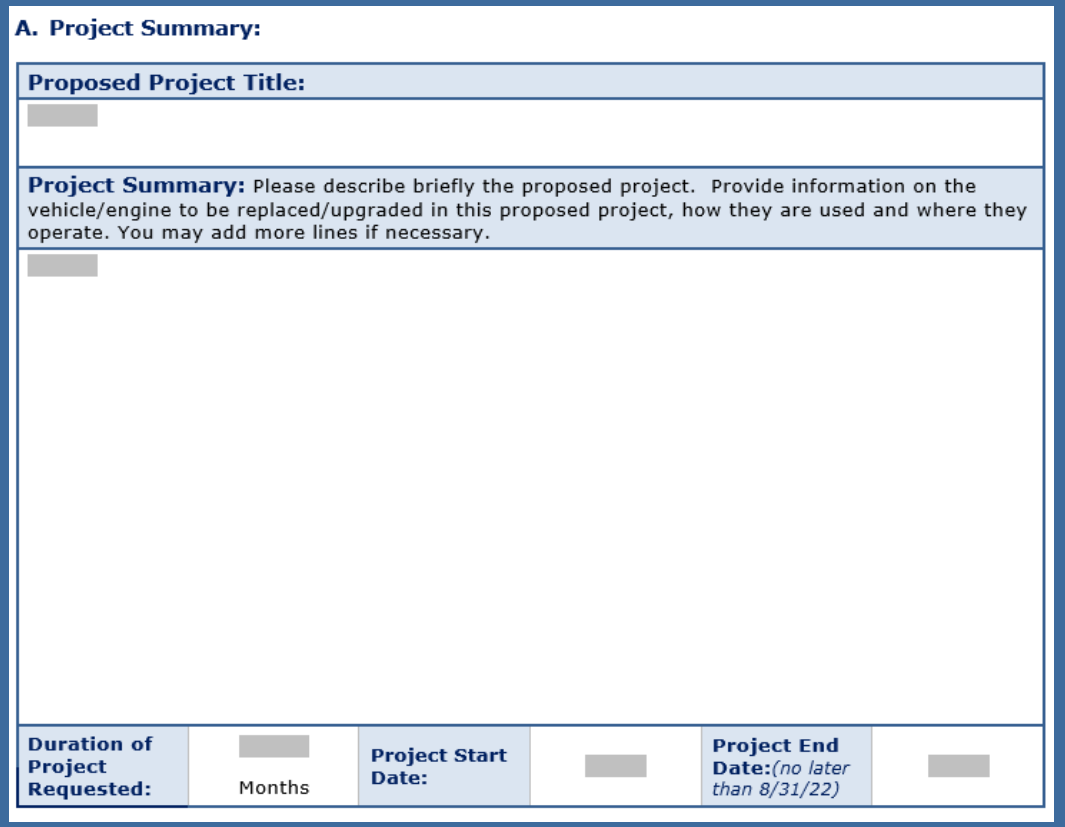
- Basic contact information
- Important to have an accurate and working e-mail address.

Part 1: Applicant Information

Applicant/Organization Name:					
Address:					
City:		**State:**		**Zip Code:**	
Authorized Representative Name:[1]					
Authorized Representative Title:					
E-Mail:		**Telephone:**			
Additional Contact Name:(*Optional*)[2]					
E-Mail:		**Telephone:**			
Additional Contact Name:(*Optional*)					
E-Mail:		**Telephone:**			
Have you previously submitted a proposal to DEEP for clean diesel or EV charger funding?	☐ Yes ☐ No				
Are you submitting additional proposals for this incentive program? If so, how many?	☐ Yes: _____ ☐ No				

Part II.A – Project Summary

- Provide a project title and anticipated project start and end dates.
- All projects should have potential for completion by August 31, 2023.
- Provide a detailed but concise description of the proposed project, including community and air quality benefits.



A. Project Summary:

Proposed Project Title:					
Project Summary: Please describe briefly the proposed project. Provide information on the vehicle/engine to be replaced/upgraded in this proposed project, how they are used and where they operate. You may add more lines if necessary.					
Duration of Project Requested:	Months	**Project Start Date:**		**Project End Date:** *(no later than 8/31/22)*	

- Include information on use of old vehicles and areas where they operate.
- **Important!!** This is your opportunity to promote the energy, environmental and economic benefits of the project.

Part II.B – Project Category

- Indicate the project category being applied for.
- If more than one category, then a separate application form should be used for each project category.
  - Exception for Aerodynamic Technologies, which can only be funded in conjunction with Emissions Control Technologies (retrofits), and
  - Exception for Highway Idle Reduction technologies, which have higher reimbursement in combination with retrofits

B. Project Category:

Project Categories Potentially Available for Funding	
Replacement: Reimbursement for replacement with diesel vehicles or nonroad equipment can be made up to	
• 25% of the cost for replacement of Class 5-8 highway diesel trucks and buses with 2016 engine model year (EMY) or newer equivalents,	☐
• 50% of the cost for replacement of drayage trucks with 2013 EMY or newer trucks,	☐
• 25% of the cost for replacement of locomotives, marine vessels, and non-road vehicles and equipment with 2019 EMY or newer equivalents,	☐
• 35% of the cost for replacement with 2016 EMY or newer on-highway vehicles powered by engines certified to meet CARB's Optional Low-NO_X Standards of 0.1 g/bhp-hr, 0.05 g/bhp-hr, or 0.02 g/bhp-hr NO_X, and	☐
• 45% of the cost for replacement with electric vehicles or equipment.	☐
Repower: Reimbursement for replacement of diesel engines can be made up to	
• 40% of the cost for replacement diesel engines in a highway vehicles with 2016 EMY or newer engines certified to EPA emission standards,	☐
• 40% of the cost for replacement of diesel engines on locomotives, marine vessels, and non-road vehicles and equipment with 2019 EMY or newer equivalents,	☐
• 50% of the cost for replacement with 2016 EMY or newer engines certified to meet CARB's Optional Low-NO_X Standards of 0.1 g/bhp-hr, 0.05 g/bhp-hr, or 0.02 g/bhp-hr NO_X, and	☐
• 60% of the cost for replacement with electric engines.	☐
Engine Upgrades: 40% of the cost for engine upgrades using kits that are verified or certified by EPA or the California Air Resources Board (CARB).	☐
Clean Alternative Fuel Conversions: 40% of the cost for aftermarket alternative fuel conversion systems. These must be certified by either CARB or EPA for the specific vehicle or engine family that is being converted; the vehicle being converted must be CARB or 50-state certified and is otherwise eligible for sale in Connecticut.	☐
Emission Control Technologies: 100% of the cost for retrofit technologies for emission control that are certified or verified by EPA or the CARB. Eligible retrofit costs include, but are not limited to: DPF cleaning machines, spare DPFs for maintenance rotation, replacement CCV filters, mechanic training, and filter cleaning contracts.	☐
Idle reduction technologies that are verified by the U.S. Environmental Protection Agency (EPA):	
• Stationary Technologies:	
○ 30% of the cost for shore connections for electrified parking spaces, hybrid electric transport refrigeration units or electrified truck stops; and	☐
○ 25% of the cost (labor and equipment) for eligible marine shorepower systems to allow maritime vessels to "plug into" an electrical power source instead of using diesel main or auxiliary engines while at port, including the cost of modifications, attachments, accessories, or auxiliary apparatus necessary to make the equipment functional.	☐
• 40% of the cost for locomotive idle reduction, stationary and on-board.	☐

Part III.A –Replacement, Repower, Engine Upgrade & Clean Alternative Fuel Conversions

- Provide number of vehicles being replaced/repowered.
- Submit all required supporting documentation.
- Part VII: Fleet Information Worksheet collects information about the old vehicles and replacements. (Will be discussed in detail later)
- **Important!!** Ensure all estimates and spec sheets are attached to application form and are legible.

A. Replacement, Repower, Engine Upgrade and Clean Alternative Fuel Conversions:

Vehicle Category	Applicable	QTY
On-Road Vehicles	☐	
Drayage Trucks	☐	
Non-Road Equipment	☐	
Commercial Marine (see A.1)	☐	
Locomotives (See A.2)	☐	

For All Replacement, Repower, Engine Upgrade or Clean Alternative Fuel Conversion Projects: Submit Completed Part VII: Fleet Information	☐
Replacement of a 2010 EMY or Newer Highway Vehicle with Scrappage of a 1996-2009 EMY Vehicle: Applicant must submit a detailed scrappage plan. *(DEEP must submit the plan to EPA for approval prior to funding.)*	☐
Drayage Truck: Applicant must provide evidence that any existing truck replaced with grant funds has a history of operating on a frequent basis over the prior year as a drayage truck. If selected, the grantee will be required to establish guidelines to ensure any new truck purchased with grant funds is operated in a manner consistent with the definition of a drayage truck	☐
Nonroad Equipment:	
• Agricultural Pumps: Applicant must provide evidence that agricultural pumps being replaced have operated at least 250 hours in the year preceding the application	☐
• All Other Nonroad Equipment *(equipment or vehicles used in construction, handling of cargo (including at a port or airport), agriculture, mining or energy production (including stationary generators)*: Applicants must provide evidence that equipment has operated at least 500 hours in the year preceding this application.	☐
• Stationary Engines: Applications which include stationary engines must provide a clear and concise justification for why/how the proposed emissions reduction is not subject to the Restriction for Mandated Measures.[3]	☐
EPA Verified Engine Upgrades: Upgrade technologies for any eligible engines must be on one of EPA's list of eligible technologies.[4] Applicants must provide evidence that the chosen technology is EPA Verified.	☐
Clean Alternative Fuel Conversions: Eligible conversions are limited to those systems that have been certified by EPA and/or CARB, and those systems that have been approved by EPA for Intermediate-Age engines.[5]	
• EPA or CARB Certified: Applicants must provide evidence that the chosen technology is EPA or CARB certified.	☐
• Eligible for Sale in Connecticut: Applicants must provide evidence that the converted vehicle would be eligible for sale in Connecticut.	☐

Part III.A.1 – Commercial Marine Vessels

- Select the type of replacement/repower
- Provide number of vessels being replaced, repowered or upgraded and number of propulsion engines and auxiliary engines being replaced/repowered

A.1. Replacement, Repower or Engine Upgrade for Marine Vessels:

Indicate the quantity of marine vessels or engines being replaced, repowered or upgraded.[6]

Vehicle Category	Number of Vessels	Number of Propulsion Engines	Number of Auxiliary Engines
Marine Replacements			
Marine Repowers			
Engine Upgrades			

Submit the following supporting documentation for the Marine Replacement/Repower Project:

Applicant must provide evidence that engines have operated at least 1,000 hours in the year preceding this application. *(Engine hours may be combined to reach the 1000-hour threshold where two engines will be scrapped and replaced with a single engine.)*	☐
Completed Part VII: Fleet Information	☐
EPA Verified Engine Upgrades: Upgrade technologies for any eligible engines must be on one of EPA's list of eligible technologies.[7] Applicants must provide evidence that the chosen technology is EPA Verified.	☐

- Submit all required supporting documentation.
- **Important!!** Provide documentation that vessels have been operating 1,000 or more hours in 12 months preceding application. (e.g. operating log)

Part III.A.2 – Locomotives

- Provide number of locomotives and number of propulsion engines & generator sets being replaced/repowered
- Only pre Tier-4 locomotives are eligible
- Select the type of replacement/repower

A.2. Replacement or Repower of Locomotives:

Indicate the quantity of locomotives and engines being replaced/repowered or upgraded.

Vehicle Category	Number of Locomotives	Number of Propulsion Engines	Number of Generator Sets
Locomotive Replacements			
Locomotive Repowers			
Engine upgrades			

Type of Replacement/Repower:

Locomotive is being repowered with a new diesel or alternate fueled or all-electric engines (including generator sets)	☐
Locomotive is being replaced with a new diesel or alternate fueled or all-electric (including generator sets) locomotive that is certified to meet the applicable EPA emissions standards.	☐

Submit the following supporting documentation for the Locomotives Category:

Provide documentation that the locomotive has been operating 1,000 or more hours in the twelve months preceding this application.	☐
Completed Part VII: Fleet Information	☐
Upgrade technologies for any eligible engines must be on one of EPA's list of eligible technologies. Applicants must provide evidence that the chosen technology is EPA Verified.	☐

- Submit all required supporting documentation.
- **Important!!** Provide documentation that locomotive has been operating 1,000 or more hours in 12 months preceding application. (e.g. operating log)

Part III.B – Emission Control Technologies

- Emission Control Technologies, a.k.a. retrofits can be fully covered
- Retrofits include
  - diesel oxidation catalysts (DOCs)
  - diesel particulate filters (DPFs)
  - systems that include closed crankcase ventilation (CCV) filtration systems.
- Indicate if technology is EPA or CARB certified.
- Submit all required supporting documentation.

B. Emission Control Technologies:

Diesel engine retrofits are one of the most cost-effective solutions for reducing diesel engine emissions. Retrofits include pollution control devices installed in the exhaust system, such as diesel oxidation catalysts (DOCs) and diesel particulate filters (DPFs), or systems that include closed crankcase ventilation (CCV) filtration systems.

For All Diesel Emission Control Technologies: Applicants must provide evidence that the chosen technology is EPA or CARB certified.	☐
Completed Part VII: Fleet Information	☐

Part III.C – Idle Reduction Technologies

- Idle reduction technologies:
  - reduce unnecessary idling of diesel vehicles or equipment
  - and/or provide services (such as heat, air conditioning, and/or electricity) while the vehicle is temporarily parked or stationary.
- Technology categories include:
  - auxiliary power units (APUs) and generator sets,
  - battery air conditioning systems,
  - thermal storage systems,
  - electrified parking spaces (truck stop electrification),
  - fuel-operated heaters,
  - shore connection systems for locomotives, and
  - automatic shutdown/start-up systems for locomotives

Part III.C.1 – Stationary Idle Reduction Technologies

- Provide address of proposed installation.
- Indicate if system will comply with international standards.
- Submit all required supporting documentation.

C.1. Stationary Idle Reduction Technologies

C.1.a. Marine Shorepower Systems:

May include cables, cable management systems, shore power coupler systems, distribution control systems, and power distribution.

Address of Proposed Installation: *Provide name of facility, street address, street intersection and/or latitude/longitude and city*	
Marine shore power system will comply with international shore power design standards (ISO/IEC/IEEE 80005-1-2012 High Voltage Shore Connection Systems or the IEC/PAS 80005-3:2014 Low Voltage Shore Connection Systems) and will be supplied with power sourced from the local utility grid.	☐

Submit the following supporting documentation for the Marine Shorepower Proposal:

Provide documentation demonstrating that applicant has site control[9] over the proposed infrastructure site.	☐
Demonstrate that the proposed system has the capacity, demand, and commitment to be utilized for more than 1,000 MW-hours per year.	☐
If the project application is selected for funding, submit the final design of the marine shore power connection system for EPA approval prior to purchase and installation. *(Requirements for the final design will be provided.)*	☐

- **Important!!** Provide documentation demonstrating that applicant has site control of proposed infrastructure site.

Part III.C.1 – Stationary Idle Reduction Technologies

C.1.a. Marine Shorepower Systems:

- Provide address of proposed installation.
- Indicate that the system will comply with international standards.
- Submit all required supporting documentation

C.1. Stationary Idle Reduction Technologies

C.1.a. Marine Shorepower Systems:

May include cables, cable management systems, shore power coupler systems, distribution control systems, and power distribution.

Address of Proposed Installation: *Provide name of facility, street address, street intersection and/or latitude/longitude and city*	
Marine shore power system will comply with international shore power design standards (ISO/IEC/IEEE 80005-1-2012 High Voltage Shore Connection Systems or the IEC/PAS 80005-3:2014 Low Voltage Shore Connection Systems) and will be supplied with power sourced from the local utility grid.	☐

Submit the following supporting documentation for the Marine Shorepower Proposal:

Provide documentation demonstrating that applicant has site control[9] over the proposed infrastructure site.	☐
Demonstrate that the proposed system has the capacity, demand, and commitment to be utilized for more than 1,000 MW-hours per year.	☐
If the project application is selected for funding, submit the final design of the marine shore power connection system for EPA approval prior to purchase and installation. *(Requirements for the final design will be provided.)*	☐

- **Important!!** Provide documentation demonstrating that applicant has site control of proposed infrastructure site.

Part III.C.1 – Stationary Idle Reduction Technologies

C.1.b. Electrified Parking Spaces (EPS), a.k.a. Truck Stop Electrification:

- Includes Transport Refrigeration Units (TRUs) with shorepower infrastructure

C.1.b. Electrified Parking Spaces (EPS):

Address of Proposed Installation: *Provide name of facility, street address, street intersection and/or latitude/longitude and city*	
Number of shorepower units to be installed	

Submit the following supporting documentation for the Electrified Parking Spaces Category:

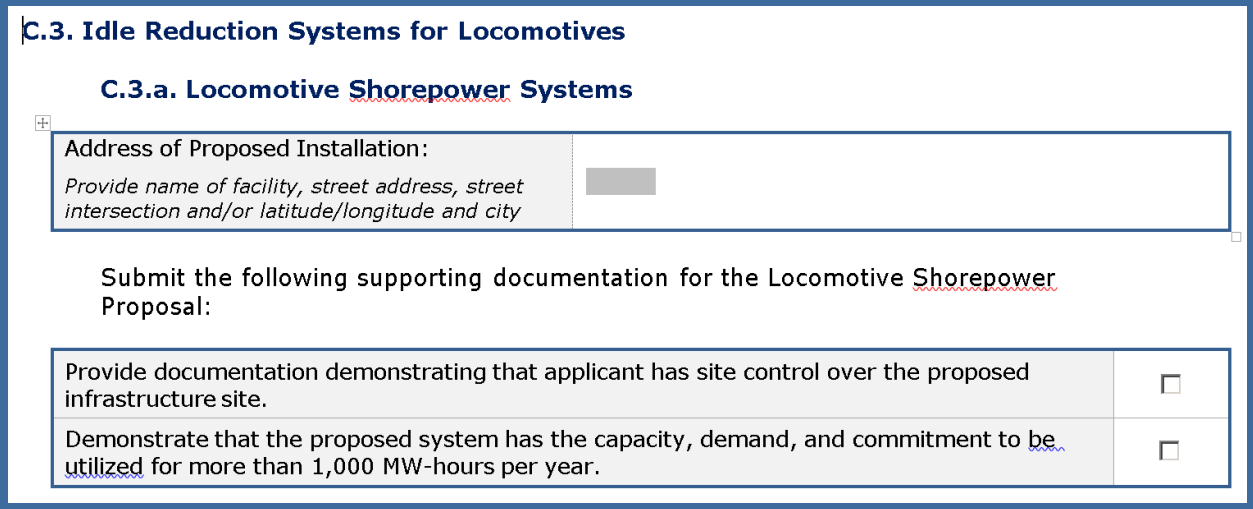
Provide documentation demonstrating that applicant has site control over the proposed infrastructure site.	☐

- Provide address of proposed installation.
- Submit all required supporting documentation
- **Important!!** Provide documentation demonstrating that applicant has site control of proposed infrastructure site.

Part III.C.3 – Locomotive Idle Reduction Technologies

C.3.a: Locomotive Shorepower Systems:

- Provide address of proposed installation.
- Indicate that system has the required capacity for >1,000 MW-hours per year.



C.3. Idle Reduction Systems for Locomotives

C.3.a. Locomotive Shorepower Systems

Address of Proposed Installation: *Provide name of facility, street address, street intersection and/or latitude/longitude and city*	

Submit the following supporting documentation for the Locomotive Shorepower Proposal:

Provide documentation demonstrating that applicant has site control over the proposed infrastructure site.	☐
Demonstrate that the proposed system has the capacity, demand, and commitment to be utilized for more than 1,000 MW-hours per year.	☐

- Submit all required supporting documentation
- **Important!!** Provide documentation demonstrating that applicant has site control of proposed infrastructure site.

Part III.C.3 – Locomotive Idle Reduction Technologies

C.3.b: Automatic Shutdown/Start-up Systems for Locomotives.

- Indicate that system is on EPA's list of eligible technologies
- Submit all required supporting documentation
- **Important!!** Provide documentation that locomotive has been operating 1,000 or more hours in 12 months preceding application. (e.g. operating log)

C.3. Idle Reduction Systems for Locomotives

C.3.b Automatic Shutdown/Start-up Systems for Locomotives.

Submit the following supporting documentation for each locomotive:

Provide documentation that the locomotive has been operating 1,000 or more hours in the twelve months preceding this application.	☐
Upgrade technologies for any eligible engines must be on one of EPA's list of eligible technologies. Applicants must provide evidence that the chosen technology is EPA Verified.	☐
Completed Part VII: Fleet Information	☐

Part III.D – Aerodynamic Technologies

EPA-Certified Aerodynamic Technologies and Low Rolling Resistance Tires:

- EPA will not fund stand-alone aerodynamic technologies or low rolling resistance tires. However, aerodynamic technologies, can be fully covered, if combined on the same vehicle with the new installation of one or more of the Verified Engine Retrofit Technologies.
- Indicate that the technology is EPA or CARB certified.
- Submit all required supporting documentation.

D. EPA-Certified Aerodynamic Technologies and Low Rolling Resistance Tires:

For All Aerodynamic Technology Projects: • Applicants must provide evidence that the chosen technology is EPA or CARB certified.	☐
• Applicants must include the installation of certified emissions control technology in the proposed project.	☐

Part III.E – EV Charging Infrastructure

- Complete **only** if replacement vehicles are electric and also installing associated charging infrastructure
- Indicate charger type, brand, model, number of chargers and number of outlets for the project.

E. EV Charging Infrastructure:

Complete **only** if you are replacing vehicles or equipment with an electric equivalent **and** installing associated charging infrastructure.

Number of EV Charging Stations to be Installed?				
Type	*Brand*	*Model*	*Number of Chargers*	*Number of Outlets*
Level 1				
Level 2				
DC Fast Charger				
Address of Proposed Installation *Provide name of facility, street address, street intersection and/or latitude/longitude and city*				
Attach all specification sheets for equipment for the EV charging infrastructure.				☐
Attach all estimates for equipment, site preparation, installation and labor for the EV charging infrastructure.				☐

- **Important!!** Applicants must have site control of installation site and documentation should be submitted.

Part IV.A – Proposed Budget: Project Costs

- Provide number of new vehicles/engines/equipment being purchased with make, model and year of each.
- Group similar units if possible.
- **Important!!** Provide values and totals for every applicable line.
- Ensure all cost estimates and spec sheets are included with submittal to enable verification of values entered on this sheet.

Part IV. Proposed Budget: Please provide a list of the expenses for the proposed project. You may add line items as needed. Attach additional sheets if more line items are required than the space allotted below.

A. Project Costs

New Vehicle/Equipment/Engine Description					Cost
Number of replacements vehicles/engines /equipment	Equipment Type (e.g. Frontloader, refuse truck)	Make	Model	Year	
Drayage truck maintenance (labor & materials) if applicable and requested[10]					
Installation Cost of Vehicle, Equipment and Engine (labor & materials)					
Total Cost of Vehicle, Equipment, Engine:					
EV Charging Infrastructure – Complete only if you are replacing with an electric Vehicle **and** installing associated charging infrastructure.					
Cost of Charging Station(s) listed in Part III E of this form					
Site Preparation Costs for EV Charging Station(s) (labor & materials)					
Installation Costs of EV Charging Station(s) (labor & materials)					
Other (please specify)					
Total EV Infrastructure Cost:					
Project Total Cost *(Total Cost of Vehicle, Equipment, Engine + EV Infrastructure Cost)*					
Anticipated Grant Award					
Grantee Cost Share					

Part IV.A – Proposed Budget Shorepower

EV Charging Infrastructure – Complete only if you are replacing with an electric Vehicle **and** installing associated charging infrastructure.	
Cost of Charging Station(s) listed in Part III E of this form	
Site Preparation Costs for EV Charging Station(s) (labor & materials)	
Installation Costs of EV Charging Station(s) (labor & materials)	
Other (please specify)	
Total EV Infrastructure Cost:	

- Provide the number of units along with brand and model.
- Enter all costs including site prep, installation, and other associated costs.
- It is not unusual for site prep and installation costs to exceed cost of the actual shorepower equipment.
- Ensure all estimates and spec sheets are attached to application form.

Part IV.A – Proposed Budget Replacement/Repowers

Project Total Cost *(Total Cost of Vehicle, Equipment, Engine + EV Infrastructure Cost)*	
Anticipated Grant Award	
Grantee Cost Share	

- **Anticipated DERA Grant Award** should not exceed the program's maximum reimbursement percentage each type of project.
  - **Example:** Replacement of municipal owned dump truck would be eligible for a maximum of 25% of "Project Total Cost" entered in the cell above.
  - **Grantee Cost Share** is the difference between the anticipated award and the project total.

Part IV.B – Balance of Funds

- Maximum funding is not guaranteed under this program.
- Applicant must attest that funds can be secured for project.
- Sources of funds and timeline to obtain funds must be provided.
  - For gov't projects, budget approval process date is important
- Indicate if the transaction will be a purchase or financed.
  Note: EPA no longer allows for leased vehicles

B. Balance of Funds

Maximum funding is not guaranteed. Be aware that funding is not guaranteed before awards are made. Note that this is a reimbursement program; applicant is responsible for all project costs prior to reimbursement.

Applicant attests they can secure the funds for replacement of vehicles, equipment or engines and for operation and maintenance.	☐ Yes ☐ No
What is the source of these funds?	
What is the timeline for securing these funds? *(For government projects: Budget approval process date)*	
How will the vehicle, equipment or engine be procured? *(EPA no longer allows funding for leased vehicles.)*	☐ Purchased ☐ Financed (Conventional Loan)

Part V –Evaluation Criteria

- Projects will be ranked based on a set of criteria reflecting funding priorities for the program.
- This is a list of preferential funding criteria and not eligibility criteria
- Check all that apply.
- **Important!!** Include required supporting information for each item.

Ranking Criteria: Please check those that apply	
Is your project located in or does the vehicle operate in one the following counties: Fairfield, New Haven or Middlesex?	☐ Fairfield ☐ New Haven ☐ Middlesex
Vehicle(s) will operate primarily in a listed environmental justice (EJ) community.[11] . *If checked please identify the community and confirm that the project vehicles, current and replacements, will spend a significant amount of time operating in the identified area.*	☐
Project is near transportation hubs or corridors. *If checked, please describe below.*	☐
Project is in an area that receives a disproportionate quantity of air pollution from diesel fleets, including ports, rail yards, terminals, construction sites, school bus depots/yards, and distribution centers. *If checked, please describe below.*	☐
Applicant has, or project includes, a motor-vehicle anti-idling education and outreach program. *If checked, please summarize plan and submit documentation proving existence of an anti-idling program.*	☐
Project is consistent with the transportation section of the 2018 Comprehensive Energy Strategy for Connecticut[12] and the State's EV Roadmap.[13] *If checked, please identify elements of the project that are consistent with these initiatives.*	☐

Part V: Evaluation Criteria

- Projects located in the NY-NJ-CT nonattainment area
  - **Important!!** For any criteria referencing location, please use the geographical area in which the vehicle/equipment operates; this may be different from the business address
  - Please indicate if project is located in one of the NY-NJ-CT non-attainment area counties listed.
- Vehicle(s) will operate primarily in a listed Environmental Justice (EJ) Community
  - **Updated!!** Towns on the DECD List of "Distressed Municipalities" and "Defined Census Blocks within Other Affected Towns" will be accepted as EJ communities.
    - Applicants are required to verify that operation of the vehicles are in the defined census block group which can be accomplished by checking the specific address using the 2020 Environmental Justice Communities (arcgis.com) tool.

Part V: Evaluation Criteria

- Project is in an area that has borne a disproportionate share of the adverse impacts of air pollution from diesel fleets, including ports, rail yards, terminals, construction sites, school bus depots/yards, and distribution centers.
- Applicant has, or project includes, a motor-vehicle anti-idling education and outreach program.
  - If checked, please summarize plan and submit documentation proving existence of an anti-idling program.
- Project is consistent with the transportation section of the 2018 Comprehensive Energy Strategy for Connecticut and the State's 2020 EV Roadmap.

Part III - Preferential Criteria

- **NEW!** Projects that result in significant reduction of carbon dioxide or other GHGs.
  - If a projected GHG reduction has been calculated for the project, please indicate the quantifier used and submit the quantifier inputs and results with application.
  - Pursuant to Public Act 18-82, An Act Concerning Climate Change Planning and Resiliency, Connecticut must now reduce GHGs to a level that is at least 45% below 2001 levels by 2030.
- Applicants with demonstrated experience for implementing diesel emissions reduction projects
  - Explain in detail how past experience or existing program structure can facilitate successful implementation of proposed project

Part III - Preferential Criteria

- Projects located near transportation hubs or corridors
- Projects with verified or leveraged cost-share exceeding the minimum requirements
  - **Important!!** Only check if you are willing to contribute more than the required cost share.
    - For example, if applicant is eligible for 25% of grant funding, the cost share would be 75%. To receive preferential criteria, the applicant would need to be willing to contribute more than 75% of a cost share to the project.
  - Explain sources of leveraged funding, amount of leveraged funding, and if funding is already secured.
- **NEW!** Applicant is an active participant in EPA's SmartWay program.

Part VI – Terms & Conditions, Submission

- **New!** Applicant must be in good standing.
- **New!** Disclosure requirement for applicants.
- **New!** Participating fleet owners must attest to the ownership, usage, and remaining life requirements in a signed eligibly statement.
- Applicant attests that information is true and correct.
- If determined funds were awarded based on false statements, funds would have to reimbursed.
- Reiterates understanding of the key points of the reimbursement program.

Part VI: Terms & Conditions

Applicant is aware of the reimbursement options within EPA's 2021 State DERA Program Guide[16]
Applicant must be in Good Standing. i. Connecticut corporations and limited liability entities must submit a Letter of Good Standing from the State of Connecticut Department of Revenue Services: Department of Revenue Services Collection and Enforcement Division-Lien Unit Request for a Status Letter 25 Sigourney Street Hartford, CT 06106 Revenue Services i. Applicant corporations not chartered in Connecticut must submit an equivalent certificate of good standing. ii. Tax Certification. All Applicants, in order for their proposals to be considered, must not be delinquent with respect to any state or federal governmental obligation, including, but not limited to any personal or corporate income tax, property tax or fee issued by the State of Connecticut or any political subdivision thereof, or from the State wherein the Applicant's principal place of business is located. Applicants shall certify that neither they nor any business or corporation fully or partially owned by the Applicant is not delinquent on their State property taxes or fees.
The Applicant must disclose any active or pending litigation within the past three years, or any other dispute or known state or federal civil or criminal investigations related to prior grant awards, government funded projects implemented by the Applicant or other projects owned or managed by the Applicant or any of its affiliates in the United States. The Applicant shall disclose any preliminary or pending claims, complaints or matter before any federal agency, or any state's legislature or regulatory agency. Applicant must disclose if the resolution of such claim or complaint could affect the feasibility of the proposed project or the ability of the Applicant to obtain required matching funding or ability to obtain any required permits for the proposed project identified in this application.
Participating fleet owners will be required to attest to the accuracy of the vehicle data, including ownership, usage, and remaining life requirements, in a signed eligibly statement following the award. This documentation may be submitted to EPA to verify the eligible use of grant funds.
Non-Government Vehicle/Equipment Owners must enter into a contract with the State of Connecticut and comply with state and federal contracting requirements.
Vehicle/Equipment Owners must agree to keep the replacement, repowered or retrofitted vehicle or equipment operational in Connecticut, with emission controls in place, for a minimum of three years or to replace with equipment with equal or better emissions reductions.

Part VI – Terms & Conditions, Submission

- Authorized representative should be someone in the grantee's organization, not a contractor.
  - The contractor may be listed as an additional point of contact.

- **Important!!** Sign and date form!

- Submit application to email address specified. Do not send directly to Air Bureau.

Part VII - Fleet Information Sheet

Part VII: Fleet Information:

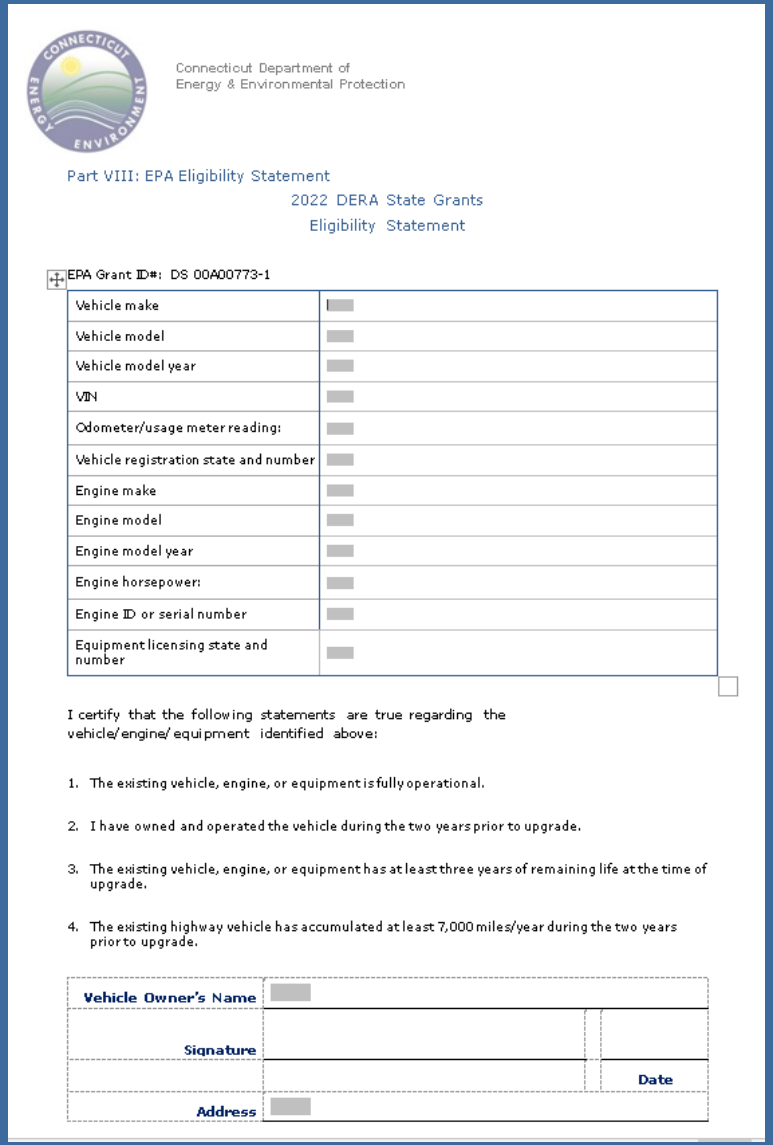
List all vehicles or pieces of equipment that will be replaced, repowered, retrofitted or fitted with highway idle reduction technology for this proposed project. Use additional sheets if needed.

Vehicle Class or Type of Equipment	Engine Make	Engine Model	Engine Model Year	Vehicle Identification Number (VIN)	Engine Serial Number	Engine Family Code	Horse-power	Cylinder Displace-ment	Current Fuel Type	Annual Fuel Usage	Annual Mileage/ Operating Hours	Vehicle Annual Idling Hours	New Fuel Type	New Engine MPG or GPH	New Engine Idling Hours Reduced

- Enter all required information about existing fleet and new fleet.
- Complete this sheet if your application is for **Repower or Replacement** of onroad vehicles, nonroad equipment, commercial marine or locomotives.

Eligibility Statement

- Vehicle & Engine Description
- Operational
- Ownership
- Remaining Life
- Usage (per year for 2 years prior to application)
  - On-Road Vehicle: 7,000 miles
  - School bus: 2019 (pre-Covid) miles
  - Locomotive & Marine: 1,000 hours
  - Nonroad Equipment: 500 hours
  - Agricultural pumps: 250 hours
- Sign & Date



Connecticut Department of
Energy & Environmental Protection

Part VIII: EPA Eligibility Statement

2022 DERA State Grants
Eligibility Statement

EPA Grant ID#: DS 00A00773-1

Vehicle make	
Vehicle model	
Vehicle model year	
VIN	
Odometer/usage meter reading:	
Vehicle registration state and number	
Engine make	
Engine model	
Engine model year	
Engine horsepower:	
Engine ID or serial number	
Equipment licensing state and number	

I certify that the following statements are true regarding the vehicle/engine/equipment identified above:

1. The existing vehicle, engine, or equipment is fully operational.
2. I have owned and operated the vehicle during the two years prior to upgrade.
3. The existing vehicle, engine, or equipment has at least three years of remaining life at the time of upgrade.
4. The existing highway vehicle has accumulated at least 7,000 miles/year during the two years prior to upgrade.

Vehicle Owner's Name		
Signature		
		Date
Address		

Forms & Submission

- Deadline will be listed on application form
- Application & Information posted at https://www.ct.gov/deep/cwp/view.asp?a=2684&q=322100&deepNav_GID=1619
- Submit package via e-mail to: DEEP.MobileSources@ct.gov with the subject “2022 DERA Grant Application”

Post-Award Information

Post-Award Information

- Award amounts may be less than originally requested based on number of applications received and funds available.
- Applicant can accept or deny the award if awarded amount does not satisfy proposed project.
- Projects and final documentation must be completed by **August 31, 2023** to be eligible for reimbursement.
- Quarterly progress reports are required to be submitted.
- Awardee required to demonstrate payment for the project and submit required documentation before receiving awarded funds.

Post-Award Information, cont'd

- Render any replaced vehicle or engine inoperable
  - For Engine Replacement: cut a 3-inch hole in the engine block
  - For Vehicle Replacement: In addition to above, disable the chassis by cutting the vehicle's frame rails completely in half

- Keep new equipment in operation for a minimum of 3 years or replace with equal or better.
- If EV infrastructure installed with electric replacement or repower, and it's publicly accessible, then must comply with CGS.

“The Lightning Round”
Answers to Common Questions

Answers to Common Questions

- Our goal is to announce award decisions within 45 days of the application deadline.
- This is a competitive grant program. Emission reductions are one part of the criteria that applications will be ranked against. Please see application form for list of preferential criteria.
- There are no targets for $/ton pollutant reduced but cost effectiveness is also an evaluation criteria
- Partial awards may be issued and maximum funding is not guaranteed
- Projects initiated prior to filing an application for the program are not eligible for funding. This includes projects in an already approved municipal budget.

Answers to Common Questions

- If an awardee decides to cancel a project, notification must be sent to DEEP as soon as possible so that the funds can be made available to other applicants within a timeframe sufficient to allow completion of the substitute project(s).
- There are no limits on the amount of funding any one project or individual entity can receive; a grantee receiving DERA funds in one year is eligible to apply again in the subsequent year.
- For review consistency, DEEP has chosen to use EPA's Diesel Emissions Quantifier (DEQ) to calculate emissions benefits.

Questions?

- We will now answer general questions about the grant program.
- We may not get to every question or have an answer to every question during the webinar.
- If you have questions relating to a specific project or piece of equipment, please email the question to: **deep.mobilesources@ct.gov**

Contact Us

E-Mail: deep.mobilesources@ct.gov